

Micro Data Collection for the Study of Egyptian Poverty in Multi-Dimensional Perspective

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1. Different aspects of poverty

Poverty is a multi-dimensional concept, not just a monetary one. It comprises various aspects of human and social life such as education, health, and housing. Furthermore, poverty has objective, and subjective dimensions as well.

The latter subjective aspect of poverty is especially important for Egypt, since it is a middle income level country, and because of the tremendous political transformation backed by the popular discontent since 2011. To understand the direction of change of Egyptian society, it is necessary to examine the subjective poverty as one of the important reasons of social discontents.

It goes without saying that the statistical materials, especially that of micro data, is necessary to study the poverty from different aspects. Because of its lack, the poverty study in the MENA region including Egypt lagged behind until the end of 1990s.

Fortunately, with the MDGs and international concern over poverty and the academic interest on research based on micro data, the micro data in many countries came to be publicly available. In the MENA region including Egypt too, the research conditions has by far improved, enabling the study of poverty from different aspects and by using various measurements.

2. Access to micro data on Egypt and other MENA countries

This section overviews the website where the database on Egypt is freely available. The micro data are available with the permission of the organizations concerned after submitting the information such as name, email address, affiliation, and research purpose, and with agreement to the compliance of the rules.

(1) Central Agency for Public Mobilization and Statistics (CAPMAS)

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CAPMAS (<http://www.msrintranet.capmas.gov.eg>) publishes the results of censuses, sample household income and consumption surveys, and other various annual statistics for public use at the website. Among them, Household Income, Expenditure and Consumption Survey (HIECS) is the most important survey for poverty study. CAPMAS has conducted this Household Income, Expenditure and Consumption Survey every four years, and every two years since 2008/2009. In the recent years, CAPMAS conducted the survey in 1999/2000, 2004/2005, 2008/2009, 2010/2011, 2012/2013. Their results are published as report and agglomerated tables on the website, and a part of the micro data are made available at household level with the permission from CAPMAS². The results of the 2014/2015 survey will be published soon.

(2) Economic Research Forum (ERF)

Economic Research Forum (<http://erf.org.eg>) is a research institution conducting economic researches on Arab countries, Iran and Turkey, located in Cairo. It has been conducting the surveys on labour and employment, and small and micro enterprises. Labour Market Panel Survey was conducted in Egypt and Jordan, and Micro and Small Enterprises Survey was conducted in Egypt, Lebanon, Turkey, and Morocco.

For Egypt, Micro and Small Enterprises Survey was conducted in 2003, and its panel survey in 2004. Labor Market Panel Survey (ELMPS) was conducted in 1998 and 2012. The research results of the latter survey are published such as in Assaad(2002)and Assad (2009).

From 2013, Economic Research Forum launched a project called Open Access Micro Data Initiative (OAMDI). The project aims at providing researchers with free access to micro data on the MENA countries. Micro data include those collected through the sample surveys implemented by Economic Research Forum, and micro data sets containing the household unit record data from the Household Income, Expenditure and Consumption Survey implemented by the National Statistical Offices. These data are now available for public use³. Currently, the micro data sets of Household Income, Expenditure and Consumption Survey conducted by the National Statistical Offices are available for Egypt, Jordan, Palestine, Tunisia, and Sudan.

As to Egypt, the micro data sets containing the household data from the Household Income, Expenditure and Consumption Survey (HIECS) are available for the years 1999/2000,

² Beside the ordinary report, a report on child poverty is published using 2012/2013 HIECS survey (CAPMAS 2015).

³ Other types of datasets include Higher Education Graduates Survey (HEGS) 2012, and Exports Data (EID-EXP 2005-2014), Imports Data (EID-IMP 2005-2014). 2012 Labor Market Survey is available also at Cross-National Data Center in Luxemburg (LIS) (<http://www.lisdatacenter.org>).

2004/2005, 2008/2009, 2010/2011, and 2012/2013, with the permission of Economic Research Forum.

(3) Minnesota Population Center, IPUMS International (Integrated Public Use Microdata Series, International)

The IPUMS (<https://international.ipums.org/international>) is a project run by Minnesota Population Center in collaboration with National Statistical Offices, and international data archives, began in 1999. The project collects the census data from around the world, and makes the sample census data available to researchers free of charge with permission. The data are samples taken from the censuses since 1960, from 82 countries in the world.

As to the MENA countries, micro data with individual and household records are collected from Egypt (1996, 2006), Morocco (1982, 1994, 2004), Jordan (2004), Iraq (1997), Iran (2006), Sudan and South Sudan (2008), Palestine (1997, 2007), and Turkey (1985, 1990, 2000).

Egyptian sample micro data is taken from 1996 and 2006 Population, Housing and Establishment Census. Samples are 10% of census data, that consists of 5,902,243 (1996) and 7,282,343 (2006) individuals' records. Data sets include basic information of households and individuals, such as educational level, employment, household composition (family type), house type, housing equipment.

(4) Demographic and Health Surveys (DHS)

Demographic and Health Surveys program (<http://www.dhsprogram.com>) began in 1984 with the financial support of USAID, housed currently at ICF International in Maryland, USA. It collected micro data on population health, HIV, and nutrition by implementing surveys in over 70 countries.

Its main survey is Demographic and Health Survey. It is conducted to collect the data on population and reproductive health, including child health, domestic violence, family planning, fertility, maternal health, women's empowerment. The surveys has been implemented in DHS-I (1984 – 1990), DHS-II (1988 – 1993), DHS-III (1992 – 1998), DHS-IV(1997 – 2003), DHS-V (2003 – 2008), DHS-VI (2008 – 2013). Since 1997, Demographic and Health Survey was changed to MEASURE *DHS+* program, and currently, DHS-VII (2013 – 2018) is under implementation.

Among the MENA countries, the largest number of surveys were implemented in Egypt: 1988, 1992, 1995, 2000, 2005, 2008, and 2014. For other countries in the MENA region, the survey was implemented in Jordan (1990, 1997, 2002, 2007, 2012), Mauritania (2000/2001,

2003/2004) , Morocco (1987, 1992, 1995, 2003/2004), Sudan (1989/1990), Tunisia (1998), Turkey (1993, 1998, 2003), Yemen (1991/1992, 1997, 2013).

The surveys are nationally representative ones, by the interview with questionnaire with the women of reproductive age (15 – 49), every five years. Micro data collected from these surveys with individual records are available.

(5) Arab Barometer / Afrobarometer

Arab Barometer (<http://www.arabbarometer.org>) is a project aiming at collecting data on political attitudes of the citizens and public opinion in the Arab countries, began in 2006. The survey was implemented in four waves, in over 14 countries in the MENA region.

- ◆ The first wave in 2006/2007 covered 7 countries including Algeria, Bahrain (2009), Jordan, Kuwait, Lebanon, Morocco, and Palestine.
- ◆ The second wave in 2010/2011 was implemented in 10 countries including Algeria, Egypt, Iraq, Jordan, Lebanon, Palestine, Saudi Arabia, Sudan, Tunisia, and Yemen.
- ◆ The third wave in 2012 – 2014 was administered in 12 countries including Algeria, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Palestine, Sudan, Tunisia, and Yemen.

Among the countries in the third wave, the survey in four countries including Egypt was implemented in Afrobarometer project (<http://www.afrobarometer.org>), in its fifth wave survey⁴.

The latter survey in Egypt was implemented in March 2013 as ‘Democracy and Quality of Governance’ Survey, three months before the large popular protests led the army to pull down President Morsi in June 2013.

The survey in 2013 includes the questions on economic situation, so that it is useful for the study of poverty. Its micro data containing individual records is available with permission on the website⁵.

3. Objective poverty using 2013 Afrobarometer survey micro data

Poverty in Egypt can be analyzed from different perspectives, using the various types of micro data described in Section 2. Household Income, Expenditure, Consumption Survey

⁴ The fifth wave Afrobarometer was implemented in 35 African countries in 2011 – 2013. See Afrobarometer website (<http://afrobarometer.org/fr/propos-de-nous/notre-histoire>).

⁵ The dataset is also available at Inter-university Consortium for Political and Social Research website (<http://www.icpsr.umich.edu/icpsrweb/landing.jsp>).

allows to study the poverty from income or expenditure approach. Micro data from the Demographic and Health Survey, on the other hand, allows to study the health and gender aspects that of censuses about the household and housing aspects, and Afrobarometer survey on how the different citizens perceive poverty.

In this section, we overview the question items related to poverty in 2013 Afrobarometer survey. Its sample is 1200 individuals aged 18 years or more, randomly chosen by multi-stage area approach from governorates and urban/rural areas and by PPS method (Probability Proportional to Size) to represent the totality of the adult at the voting age.

The questionnaire of 2013 survey includes five following question items related to poverty. The answers to the questions are given in a 1 – 5 point rating.

- (1) “In general, how would you describe”:
 - A. The present economic condition of Egypt?
 - B. Your own present living conditions?,
- (2) “In general, how do you rate your living conditions compared to those of other Egyptians?”
- (3) “Looking back, how do you rate the following compared to twelve months ago?”
 - A. Economic condition in Egypt?
 - B. Your living conditions?
- (4) “Looking ahead, do you expect the following to be better or worse?”
 - A. Economic conditions in Egypt in twelve months time?
 - B. Your living conditions in twelve months time?
- (5) “Over the past year, how often, if ever, have you or anyone in your family”:
 - A. Gone without enough food to eat?
 - B. Gone without enough clean water for home use?
 - C. Gone without medicines or medical treatment?
 - D. Gone without enough fuel to cook your food?
 - E. Gone without a cash income?

The tables 1 to 5 reports the frequency distribution of the answers to these questions, with the samples classified into regions (Cairo, Other Urban Governorates, Lower, and Upper Egypt) and urban/rural areas.

Question (5) relates to the basic material deprivation. The distribution of the answers by region is somewhat similar to that of the poverty measured on consumption term. In fact, the rural Upper Egypt, where the consumption based poverty is most serious, has more residents perceiving the lack of the items mentioned in A – E (Table 1).

It is noted also that more than half of the residents in Upper Egypt and Lower Egypt as well, of both urban and rural areas, reported the lack of clean water, medical treatment, cooking fuel, and cash income once or more times.

Table 1 “Over the past year, how often, if ever, have you or anyone in your family” (%)

		Cairo	Other Urban Governorates	Lower Egypt		Upper Egypt		Total
				Urban	Rural	Urban	Rural	
Food	Never	80.7	80.9	59.0	68.5	59.5	62.9	67.4
	Just once or twice	10.7	7.3	21.6	15.3	14.2	16.6	15.0
	Several times	7.9	7.3	13.7	12.7	12.2	12.7	11.7
	Many times	0.7	4.6	5.0	2.9	13.5	6.2	5.2
	Always	0.0	0.0	0.0	0.6	0.0	1.3	0.5
	Don't know	0.0	0.0	0.7	0.0	0.7	0.3	0.3
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Clean water	Never	61.4	61.8	57.6	67.3	52.0	40.7	56.2
	Just once or twice	12.1	10.9	13.0	12.7	8.8	17.3	13.2
	Several times	15.7	19.1	17.3	11.9	22.3	19.5	16.9
	Many times	9.3	8.2	8.6	5.5	13.5	16.3	10.3
	Always	1.4	0.0	2.2	1.7	2.7	5.2	2.6
	Don't know	0.0	0.0	1.4	0.9	0.7	1.0	0.8
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Medicines Medical treatment	Never	50.7	66.4	46.8	55.2	43.9	40.4	49.5
	Just once or twice	20.0	10.9	18.7	17.9	12.2	16.3	16.5
	Several times	17.9	14.6	21.6	15.3	24.3	18.6	18.2
	Many times	8.6	8.2	10.8	9.8	16.2	21.2	13.4
	Always	2.9	0.0	0.0	1.7	3.4	3.3	2.1
	Don't know	0.0	0.0	2.2	0.0	0.0	0.3	0.3
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel	Never	55.0	63.6	44.6	51.5	44.6	35.5	47.2
	Just once or twice	25.7	12.7	18.0	14.2	18.2	15.3	16.6
	Several times	14.3	17.3	28.8	19.4	23.0	21.2	20.6
	Many times	4.3	6.4	5.8	13.0	10.8	20.9	12.3
	Always	0.7	0.0	1.4	1.5	3.4	5.5	2.5
	Don't know	0.0	0.0	1.4	0.6	0.0	1.6	0.8
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cash income	Never	56.4	59.1	48.2	53.5	46.6	46.3	51.0
	Just once or twice	20.0	14.6	14.4	15.9	15.5	18.6	16.7
	Several times	8.6	11.8	23.0	17.3	14.2	11.7	14.6
	Many times	11.4	11.8	13.0	11.9	18.2	17.6	14.2
	Always	3.6	2.7	1.4	1.5	4.1	3.6	2.7
	Don't know	0.0	0.0	0.0	0.0	1.4	2.3	0.8
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Samples		140	110	139	346	148	307	1,190

Note: Other Urban Governorates include Alexandria, Suez, and Ismailia. Red Sea governorate is included in Upper Egypt.

Source: 2013 Afrobarometer data.

Interestingly, the perception on economic condition in Egypt and respondent's own living condition shows a reverse pattern by region. Overall opinion at the time of March 2013 was that the majority of Egyptians perceived their living condition bad, and worsened since one

year ago, and thought it would worsen 12 month later. This pessimistic perception was very much observed among the citizens in Cairo governorate. Majority of the citizens in Cairo perceived the present living conditions as 'very bad' (46.4%), and consider it 'much worse' (35.7%) or 'worse' (42.1%) than 12 months before, and that it will get 'much worse' (37.9%) or 'worse' (29.3%) 12 month later (Table 2, 3, 4).

The citizens living in the urban and rural areas in Lower and Upper Egypt seem to be more optimistic about the economic situation and their living conditions. This is especially so for the opinion about the living conditions at the time of survey and 12 months later.

The opinion about the living conditions compared to other Egyptians reveals also same pattern (Table 5). The citizens in the other Urban Governorates, Lower and Upper Egypt perceived themselves 'same' or 'worse', whereas the citizens in Cairo are divided between those who consider their living conditions 'much worse' and 'better'. This maybe the reflection of actual income inequality in Egypt whose level is higher in Cairo and is low in the small towns and rural areas.

The results of the survey evidence the characteristic of poverty in Egypt, that is the regional distribution of objective poverty measured by consumption and subjective poverty. In Egypt, there are two types of poverty, objective and subjective. The first one is in rural Upper Egypt and the latter one in Cairo.

There is no agreement about the relationship between objective and subjective poverties. Their relationship may differ by country/region. For instance, the regional distribution of subjective poverty within Tunisia is similar to that of objective poverty (岩崎 2015). In Tunisia, using the same Afrobarometer survey data, it was found that the pessimistic view of the economic and living conditions is especially pronounced in the central west region where the consumption based poverty is the most prevailing in Tunisia.

Then, why do the citizens in Cairo governorate are pessimistic about the economic situation and their living conditions, although they are much better off than the citizens in other areas? Poverty is a mirror of society, and through the investigation of its reasons, we may understand the characteristics of the socioeconomic structure of Egyptian society. One of them is, as the study on chronicle and temporary poverty in Egypt suggests, the vulnerability of Egyptian economic structure.

Table 2 “In general, how would you describe” (%)

		Cairo	Other Urban Governorates	Lower Egypt		Upper Egypt		Total
				Urban	Rural	Urban	Rural	
Present economic condition in Egypt	Very bad	72.9	60.0	59.7	50.3	64.2	49.8	56.6
	Bad	10.0	27.3	29.5	33.5	24.3	31.6	28.1
	Same	8.6	6.4	7.2	8.7	5.4	8.8	7.9
	Good	6.4	4.6	2.9	6.7	3.4	7.8	5.9
	Very good	2.1	0.0	0.0	0.6	2.0	1.0	0.9
	Don't know	0.0	1.8	0.7	0.3	0.7	1.0	0.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Your own present living conditions	Very bad	46.4	27.3	38.1	33.0	35.1	35.5	35.6
	Bad	27.1	35.5	33.1	39.6	31.8	27.4	32.9
	Same	17.9	23.6	19.4	15.6	17.6	12.4	16.5
	Good	7.1	13.6	9.4	10.7	12.2	21.5	13.4
	Very good	1.4	0.0	0.0	0.9	2.7	3.3	1.6
	Don't know	0.0	0.0	0.0	0.3	0.7	0.0	0.2
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Samples	140	110	139	346	148	307	1,190	

Source: 2013 Afrobarometer data.

Table 3 “Looking back, how do you rate the following compared to twelve months ago?” (%)

		Cairo	Other Urban Governorates	Lower Egypt		Upper Egypt		Total
				Urban	Rural	Urban	Rural	
Economic condition in Egypt	Much worse	47.1	46.4	44.6	35.6	40.5	36.8	39.9
	Worse	37.1	35.5	43.2	43.4	37.2	37.5	39.6
	Same	10.7	10.0	5.8	9.3	12.2	14.3	10.8
	Better	4.3	7.3	5.8	11.0	9.5	7.8	8.2
	Much better	0.0	0.0	0.0	0.6	0.0	1.6	0.6
	Don't know	0.7	0.9	0.7	0.3	0.7	2.0	0.9
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Your living conditions	Much worse	35.7	30.0	41.0	28.9	25.0	31.3	31.3
	Worse	42.1	40.9	34.5	42.2	40.5	30.3	37.9
	Same	17.1	20.9	17.3	15.6	21.6	23.1	19.2
	Better	4.3	7.3	7.2	11.3	12.2	11.7	9.8
	Much better	0.0	0.0	0.0	1.7	0.0	2.3	1.1
	Don't know	0.7	0.9	0.0	0.3	0.7	1.3	0.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Samples	140	110	139	346	148	307	1,190	

Source: 2013 Afrobarometer data.

Table 4 “Looking ahead, do you expect the following to be better or worse?” (%)

		Cairo	Other Urban Governorates	Lower Egypt		Upper Egypt		Total
				Urban	Rural	Urban	Rural	
Economic condition in Egypt	Much worse	46.4	19.1	24.5	17.1	23.0	24.4	24.2
	Worse	25.7	29.1	30.2	29.8	23.7	20.9	26.2
	Same	5.0	11.8	5.8	6.4	6.8	13.7	8.6
	Better	12.9	30.0	28.8	26.3	27.7	25.1	25.2
	Much better	1.4	4.6	1.4	7.2	6.1	8.5	5.8
	Don't know	8.6	5.5	9.4	13.3	12.8	7.5	10.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Your living conditions	Much worse	37.9	19.1	28.1	17.6	16.9	22.2	22.4
	Worse	29.3	23.6	19.4	25.4	23.0	20.2	23.4
	Same	10.0	16.4	13.7	9.8	14.9	14.3	12.7
	Better	13.6	30.0	27.3	28.6	28.4	25.1	25.9
	Much better	1.4	4.6	3.6	4.9	4.7	9.5	5.5
	Don't know	7.9	6.4	7.9	13.6	12.2	8.8	10.2
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Samples	140	110	139	346	148	307	1,190	

Source: 2013 Afrobarometer data.

Table 5 “In general, how do you rate your living conditions compared to those of other Egyptians?” (%)

	Cairo	Other Urban Governorates	Lower Egypt		Upper Egypt		Total
			Urban	Rural	Urban	Rural	
Much Worse	23.6	12.7	15.8	17.6	12.8	17.6	17.1
Worse	17.9	28.2	25.9	34.1	27.0	32.3	29.3
Same	35.0	46.4	45.3	32.7	42.6	32.3	36.8
Better	22.9	10.0	11.5	14.2	10.1	12.1	13.5
Much Better	0.7	0.9	0.7	0.6	4.1	4.9	2.2
Don't know	0.0	1.8	0.7	0.9	3.4	1.0	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Samples	140	110	139	346	148	307	1,190

Source: 2013 Afrobarometer data.

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